

Abstract

A fuel injector has a piezoelectric or magnetostrictive actuator (4), which actuates a valve-closure member (17) cooperating with a valve-seat surface (18) to form a sealing seat. A hydraulic coupler (7) includes a master piston (9), a slave piston (10), and a coupler volume (23) formed in-between. The master piston (9) and the slave piston (10) are axially displaceable with respect to one another. The coupler volume (23) is connected to a compensating chamber (12) via a throttle (24). A flexible section (13) delimits the compensating chamber (12) at least partially, and the coupler volume (23), the throttle (24), and the compensating chamber (12) are filled with a hydraulic medium. At least one spring element (33) directly or indirectly exerts pressure on the flexible section (13) from the outside, via fixed components.

Fig. 3)